

ABSTRACT

The present invention provides a method for forming a thin film using a CVD process in which a large-scale vacuum exhaust unit or neutralization unit is not required, and a patterning step after the formation of the film is not required. A pattern formed of a monolayer is formed using (heptadecafluoro-1,1,2,2-tetrahydro)decyl-triethoxysilane on a surface to form a thin film of a second glass substrate. Droplets formed of trimethylaluminum are placed on a plurality of parts of an upper surface of a first substrate. The droplets are placed at the positions corresponding to openings of the monolayer pattern. Both substrates are placed in parallel with a predetermined distance therebetween, and the openings and the droplets are aligned with each other. While supplying nitrogen gas between the substrates, the second substrate is heated to 300°C and retained for 5 minutes. Thereby, the droplets are vaporized and the gas is fed into the openings. Aluminum resulting from decomposition by heat is deposited in these parts and aluminum thin films are formed.